Mr. Christopher Mathieson
Bomarko Inc.
P.O. Box K
Plymouth, IN 46563

Re: **099-13815-00021**
First Minor Permit Modification to
Part 70 No.: T 099-7713-00021

Dear Mr. Mathieson:

Bomarko, Inc. was issued a permit on March 11, 1999 for a stationary waxed and coated paper and foil roll and sheeted stock manufacturing operation. A letter requesting changes to this permit was received on January 23, 2001. Pursuant to the provisions of 326 IAC 2-7-10.5, a minor permit modification to this permit is hereby approved as described in the attached Technical Support Document.

Bomarko, Inc. has proposed the addition of one flexographic printing press to their existing source. The only changes to the permit required due to the proposed modification include adding the press to the emission unit summary of Condition A.2 and the facility description of Section D.1.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Scott Fulton, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for Scott Fulton or extension (3-5691), or dial (317) 233-5691.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
SDF
cc: File - Marshall County
U.S. EPA, Region V
Marshall County Health Department
Northern Regional Office
Air Compliance Section Inspector - Rick Reynolds
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Bomarko, Inc.
1955 North Oak Road
Plymouth, Indiana 46563

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T099-7713-00021	Issuance Date: March 11, 1999

First Minor Permit Modification: 099-13815-00021	Affected Pages: 6, 29, with page 29a added
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:

9. one (1) flexographic printing press (ID No. 1-2-P9), with a maximum line speed of 800 feet per minute and a maximum printing width of 50 inches, exhausting through one (1) stack (ID No. 1-2-P9-1); ~~and~~

10. one (1) flexographic printing press, identified as PW2, with a maximum line speed of 1250 feet per minute and a maximum printing width of 60 inches; and

1~~0~~**1**. one (1) paper-fired boiler (ID No. 1-1A-J), also burning natural gas at a maximum heat input rate of 3.0 million British thermal units (MMBtu) per hour, with a woven fiberglass fabric baghouse for PM control, exhausting through one (1) stack (ID No. 1-1A-J-1).

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(1) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour including:

a. one (1) hot water boiler, rated at 0.164 MMBtu per hour;
b. two (2) hot water boilers, each rated at 0.66 MMBtu per hour;
c. one (1) boiler, rated at 2.14 MMBtu per hour;
d. one (1) hot water boiler, rated at 2.58 MMBtu per hour; and
e. one (1) boiler, rated at 1.5 MMBtu per hour.

(2) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 including:

a. one (1) Safety Kleen cold parts cleaner.

(3) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22); and

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(1) one (1) flexographic rotogravure printing press (ID No. 1-2-P1), with a maximum line speed of 600 feet per minute and a maximum printing width of 50 inches, exhausting through one (1) stack (ID No. 1-2-P1-1);
(2) one (1) flexographic rotogravure printing press (ID No. 1-2-P2), with a maximum line speed of 600 feet per minute and a maximum printing width of 50 inches, exhausting through one (1) stack (ID No. 1-2-P2-1);
(3) one (1) rotogravure printing press (ID No. 1-2-P3), with a maximum line speed of 800 feet per minute and a maximum printing width of 45 inches, exhausting through two (2) stacks (ID Nos. 1-2-P3-1 and 1-2-P3-2);
(4) one (1) rotogravure printing press (ID No. 1-2-P4), with a maximum line speed of 600 feet per minute and a maximum printing width of 45 inches, exhausting through three (3) stacks (ID Nos. 1-2-P4-1, 1-2-P4-2, and 1-2-P4-3);
(5) one (1) rotogravure printing press (ID No. 1-2-P5), with a maximum line speed of 1,200 feet per minute and a maximum printing width of 44 inches, exhausting through one (1) stack (ID No. 1-2-P5-1);
(6) one (1) packaging rotogravure printing press (ID No. 1-2-P6), with a maximum line speed of 800 feet per minute and a maximum printing width of 32 inches, with a catalytic incinerator for VOC control, exhausting through one (1) stack (ID No. 1-3-INC-1);
(7) one (1) flexographic printing press (ID No. 1-2-P7), with a maximum line speed of 800 feet per minute and a maximum printing width of 50 inches, exhausting through two (2) stacks (ID Nos. 1-2-P7-1 and 1-2-P7-2);
(8) one (1) rotogravure printing press (ID No. 1-2-P8), with a maximum line speed of 800 feet per minute and a maximum printing width of 45 inches, exhausting through one (1) stack (ID No. 1-2-P8-1); and
(9) one (1) flexographic printing press (ID No. 1-2-P9), with a maximum line speed of 800 feet per minute and a maximum printing width of 50 inches, exhausting through one (1) stack (ID No. 1-2-P9-1).
(10) one (1) flexographic printing press, identified as PW2, with a maximum line speed of 1250 feet per minute and a maximum printing width of 60 inches.
(10**1**) one (1) paper-fired boiler (ID No. 1-1A-J), also burning natural gas at a maximum heat input rate of 3.0 million British thermal units (MMBtu) per hour, with a woven fiberglass fabric baghouse for PM control, exhausting through one (1) stack (ID No. 1-1A-J-1).

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-5-5] [326 IAC 2-2]

Pursuant to 326 IAC 8-5-5, the Permittee may not cause, allow, or permit the operation of Presses 1-2-P3, 1-2-P4, 1-2-P5, 1-2-P6, 1-2-P7, 1-2-P8, and 1-2-P9 employing solvent-containing ink unless:

(a) the volatile fraction of the ink, as it is applied to the substrate, contains 25% by volume or less of volatile organic compound (VOC) and 75% by volume or more of water; or
(b) the ink as it is applied to the substrate, less water, contains 60% by volume or more nonvolatile material; or
(c) the owner or operator installs and operates:
    (1) a carbon adsorption system that reduces the VOC emissions from the capture system by at least 90% by weight;

(2) an incineration system that oxidizes at least 90% of the nonmethane VOC to carbon dioxide and water; or

(3) an alternative VOC emission reduction system demonstrated to have at least a 90% reduction efficiency, measured across the control system, and has been approved by the commissioner; or

(d) for packaging rotogravure and flexographic printing processes, the ink, as applied to the substrate, meets an emission limit of 0.5 pound of VOC per pound of solids in the ink.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Minor Permit Modification to a Part 70 Operating Permit

Source Background and Description

Source Name:	Bomarko, Inc.
Source Location:	1955 North Oak Road, Plymouth, Indiana 46563
County:	Marshall
SIC Code:	2671
Operation Permit No.:	T099-7713-00021
Issuance Date:	March 11, 1999
Permit Modification No.:	099-13815-00021
Permit Reviewer:	SDF

The Office of Air Quality (OAQ) has reviewed an application for a minor modification to a Part 70 permit application from Bomarko, Inc. relating to the proposed addition of one flexographic printing press to their existing waxed and coated paper and foil roll and sheeted stock manufacturing operation.

The proposed flexographic printing press is designed to operate on its own and will not debottleneck any of the existing equipment. The existing source printing operation consists only of 9 other printing presses and one source paper-fired boiler.

The emissions generated will be in addition to the emissions of the existing presses. The unrestricted VOC potential to emit from this press is estimated to be 7.59 tons per year which is at exempt levels under 326 IAC 2-1.1-3. The emissions will not be controlled.

The proposed flexographic printing press is subject to 326 IAC 8-5-5.

The proposed modification is a minor permit modification to the existing Title V source, pursuant to 326 IAC 2-7-12(b)(1)(F).

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) OP 50-01-85-0105: Issued on April 21, 1981
(b) Registration: Issued on January 9, 1985
(c) Registration: Issued on January 31, 1986
(d) PC (50) 1613.

This permit was public noticed on May 29, 1986. However, the permit was voided and the original destroyed according to the policy memo of E.F. Stresino of May 20, 1981.

(d) Exemption: Issued October 30, 1986
(e) Registration: Issued October 7, 1988

(f) Exemption: Issued June 8, 1989
(g) Registration: Issued September 26, 1991
(h) Construction Permit: Issued January 3, 1992

This permit was for Press No. 10 which is no longer in service.

(i) Exemption: Issued January 14, 1992
(j) Title V Permit: Issued March 11, 1999

All conditions from previous approvals were incorporated into this Part 70 permit.

Recommendation

The staff recommends to the Commissioner that the Minor Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application.

An application for the purposes of this review was received on January 23, 2001.

Emission Calculations

The following calculations determine the unrestricted potential to emit from the proposed printing press based on use of the worst case ink, a maximum line speed of 1250 feet/min, a maximum print width of 60 inches, a maximum coverage of 0.972 lb/MMin^2, 3% volatiles, 100% flashoff, 8760 hours per year, and emissions before controls.

Throughput = 1250 ft/min * 12 in/ft * 60 in * 60 min/hr * 8760 hr/yr *1/1E6 MMin^2/in^2 = 473,040 MMin^2/yr

VOC = 473040 MMin^2 * 0.033 (fraction volatile) * 1.00 (fraction flashoff) * .972 lb/MMin^2 * 1/2000 ton/lb = 7.59 tons/yr

Potential To Emit of Modification:

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

Pollutant	Potential Emissions (tons/year)
PM	less than 100
PM-10	less than 100
SO_2	less than 100
VOC	greater than 250
CO	less than 100
NO_x	less than 100

(a) The source potential emissions (as defined in 326 IAC 1-2-55) of VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
PW2	-	-	-	7.59	-	-	-
Total Emissions	**-**	**-**	**-**	**7.59**	**-**	**-**	**-**

Justification for the Modification

The Part 70 Operating permit is being modified through a Part 70 Minor Permit Modification. This modification is being performed pursuant to 326 IAC 2-7-12(b)(1)(F). Pursuant to 326 IAC 2-7-12(b)(1)(F), modifications that do not qualify for an administrative amendment but are not a significant modification, are minor permit modifications.

The proposed printing press does not qualify for an administrative amendment under 326 IAC 2-7-11 because there is a new applicable requirement associated with the printing press. The proposed printing press does not qualify for a significant permit modification under 326 IAC 2-7-12(d) because the potential to emit is at exempt levels and the new applicable requirement is an additional requirement, not a relaxation. The source does not qualify for a minor source modification because the press PTE (7.59 tons VOC/yr) is less than the 326 IAC 2-7-10.5(d)(4)(B) applicable level of 10 tons VOC/yr.

County Attainment Status

The source is located in Marshall County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Marshall County has been designated as attainment or unclassifiable for ozone.

(b) Marshall County is classified as attainment or unclassifiable for all other criteria pollutants.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

(a) The proposed printing press is not subject to the requirements of the New Source Performance Standard, 40 CFR 60, Subpart QQ, because the proposed printing press is not a publication rotogravure printing press.

(b) The proposed printing press is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart KK, because the proposed printing press is not a publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing press.

State Rule Applicability - Entire Source

There are no new entire source state rules that apply to the proposed printing press.

State Rule Applicability - Individual Facilities

326 IAC 8-5-5 (Graphic Arts Operations)

The proposed printing press is subject to 326 IAC 8-5-5 because the proposed printing press is a flexographic press that is being added to a source whose potential emissions are greater than 100 tons per year.

Pursuant to 326 IAC 8-5-5, the VOC content of the ink, as applied to the substrate from printing press PW2 shall be limited to 0.5 pound VOC pound per pound of solids in the ink.

The worst case ink VOC content used in press PW2 is estimated to be 0.06 lb VOC/lb solids which is less than the limit of 0.5 pound of VOC per pound of solids. Thus, compliance is determined to be achieved.

[0.033 (fraction VOC) * 9.04 lb/gal] / [0.541(fraction solids) * 9.04 lb/gal] = 0.06 lb VOC/gal solids

Compliance Requirements

Permits issued under 326 IAC 2-7are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Quality (OAQ) Part 70 Application Form GSD-08.

None of the listed air toxics will be emitted from the proposed printing press.

Conclusion

The operation of this waxed and coated paper and foil roll and sheeted stock manufacturing operation shall be subject to the conditions of the attached proposed Minor Permit Modification to a Part 70 Permit No. 099-13815-00021.